



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/578,907

05/12/2006

Friedrich Boecking

R.306606

3247

2119

7590

05/26/2009

RONALD E. GREIGG

GREIGG & GREIGG P.L.L.C.

1423 POWHATAN STREET, UNIT ONE

ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, DINH Q

ART UNIT

PAPER NUMBER

3752

MAIL DATE

DELIVERY MODE

05/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,907	Applicant(s) BOECKING, FRIEDRICH	
	Examiner Dinh Q. Nguyen	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 15 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-21 and 28-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-21 is/are rejected.
- 7) ☒ Claim(s) 28-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The amended claim 1 has been amended with limitation “a first spring element (24) which surrounds the booster housing (9), wherein the pressure booster (8) is directly braced against the first spring element (24)” that is contradicting with the amended paragraph 0027 of the specification, wherein “A first spring element 24 is braced on an end face 23 of the sleeve 19 diametrically opposite the bite edge 21. The first spring element 24 is embodied annularly and encloses the booster portion 11 of the injection valve member 10. Spiral springs, tube springs, or other annularly embodied spring elements known to one skilled in the art are suitable examples as spring elements 24. With its other side, the spring element 24 is braced against a ring 25, which is preferably located in a plunge cut 26 that is located between the booster portion 11 and the guide portion 12 of the injection valve member 10.”. The spring element that surrounds the booster housing is the second spring element 27 that surrounds the booster housing 9 that “braced with one side on a step 28 on the booster housing 9 and with its other side on a ring 29, which rests on a step 30 of the pressure booster 8” as disclosed at paragraph 0028 of the specification, thus the pressure booster is not directly braced against the first spring element but via ring 29. The

Art Unit: 3752

amended claim 28 cites “wherein the sleeve (19) comprises a bite edge (21), which is pressed, by means of a second spring (27)” that is contradicting with the amended paragraph 0027 of the specification, wherein “A first spring element 24 is braced on an end face 23 of the sleeve 19 diametrically opposite the bite edge 21.” Claim 33 recites the limitation “the step” in line 4. There is insufficient antecedent basis for this limitation in the claim.

3. For the purpose of this Office action, the claims will be examined as best understood by the examiner.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruehle (WO 01/29403) as best understood by the examiner.

Ruehle discloses a high-pressure fuel reservoir that connected to inlet 37, a pressure booster adjacent to element 6 received in a booster housing 7/4b, an injection valve member 20/23/33 that has at least one booster portion 20 and that has one needle portion 33 that closes at least one injection opening, a first spring element 8 which surrounds the booster housing 7/4b, wherein the pressure booster is directly braced against the first spring element, and a nozzle housing 13/15/16/17 with part 13 that encloses the injection valve member 23, wherein the booster housing 7/4b is

Art Unit: 3752

pressed against the nozzle housing part 15/16/17 by the first spring element 8, the booster portion 23 of the injection valve member 20/23/33 is enclosed by a sleeve 25/26, the sleeve 25/26 laterally defining and sealing off a booster chamber 32, and the booster chamber 32 being defined on two diametrically opposite sides by a lower end face of the pressure booster and by an end face of the booster portion 23 of the injection valve 20/23/33.

Allowable Subject Matter

6. Claims 28-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten or amend to overcome the objections and rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this office action, and rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed December 15, 2008 have been fully considered but they are not persuasive in view of Ruehle that the Examiner using the disclosure of U.S. Patent No 6,685,105 as the English language for the German text for the WO 01/29403 reference.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3752

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q. Nguyen whose telephone number is 571-272-4907. The examiner can normally be reached on Monday-Thursday 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3752

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dinh Q Nguyen/
Primary Examiner, Art Unit 3752

dqn